TONGUE DEPRESSOR

Background of the Invention

This invention relates to the field of medical apparatus and particularly to tongue depressors for use with, but not limited to, youthful patients during oral examinations.

This invention makes oral examinations less emotionally traumatic and more enjoyable for young patients. Colorful, visually arresting designs imprinted onto the tongue depressor provide a pleasant surprise to a fearful child and, given the opportunity to select from a variety of different designs, provides the patient a sense of empowerment, direct involvement and control over this otherwise uncomfortable part of the examination process. The invention creates relationship-enhancing doctor-patient interactivity, encourages patients' cooperation during the exam, and encourages them to be less fearful of, and upset by, tongue depressors, oral exams, and, in general, visits to the doctor.

Upon completion of the examination, the doctor may offer the patient the used tongue depressor, or even a new, unused tongue depressor, as an entertaining keepsake or "reward" for the patient's cooperation, thereby prolonging the enjoyed experience so that the child will retain positive associations with tongue depressors, oral examinations and doctors in the future. Furthermore, by making tongue depressors available to young patients for use as playthings outside of the medical environment, children may more easily overcome their fears and discomfort concerning tongue depressors, oral exams and doctors.

Along with injections and dental drilling, oral examinations are vociferously feared and dreaded by a majority of pediatric patients. The oral examination--a visual medical inspection of the oral cavity--is an integral part of a physical examination, which is performed on virtually every pediatric patient whether ill or well. Anxiety and fear generated by the anticipation and execution of the oral exam creates not only emotional distress for young patients and their parents but also places severe strain on the doctor-patient relationship. In addition, pediatric patients' fear-inspired resistance to the oral exam delays the process, thereby further hampering an already time-constrained doctors' productivity.

Even before hearing the request to "open your mouth and say aah," the sight of a tongue depressor in a doctor's hand can send a child into a hysterical fit, prompting a desperate fight to prevent an oral examination from proceeding. This reaction is inspired by the patient's recollection from previous examinations of unpleasantness associated with the tongue depressor--most commonly an involuntary gagging reflex upon insertion of the depressor into the oral cavity and, more generally, the doctor's unwelcome invasion into a sensitive body part that occurs directly before the patient's eyes.

Consequently, every pediatric practitioner must devise a method to gain patients' cooperation. These typically range from the promise of a reward (e.g., a sticker or lollipop) to physical restraint (e.g. a papoose board or parent intervention). The prospect of a subsequent reward, however, is often forgotten by younger patients in the presence of immediate discomfort. This is especially true if the reward cannot be enjoyed at the time of the exam, or if it is not constantly within the patient's view. The use of physical restraint is likely to amplify a patient's fear and discomfort at the time of the exam and creates a negative memory for future doctor's visits. Consequently, these methods do little to quell patients' fear of the oral examination or the tongue depressor itself, thus perpetuating a fundamental strain in the ongoing relationship shared among patients, parents and doctors. As a result, the oral exam remains a traumatic experience, with the doctor seen as an inflictor of pain and the tongue depressor as an item to be feared.

Three primary categories of prior art tongue depressors arguably exist: those that incorporate candy or another child-friendly inducement as an integrated component or attachment; those treated with flavorings or other edible coatings; and those impregnated with a colorant. None, however, allow for any design element to be found over the entire surface (top and/or bottom) of the depressor; i.e., over an area of the depressor that can, and is, put into the patient's mouth. In addition, none are designed to deliver immediate gratification to the patient immediately before, during, and after the execution of oral examination.

One of the key flaws in prior art tongue depressors bearing candy coatings or candy attachments is the patient's increased salivation resulting from the presence of the candy, which hinders the doctor's visual field, diminishes the blade's "grip" on the patient's tongue, and may interfere with various medical procedures including the taking

of throat cultures. In addition, parental objection to bribing their child with candy, especially by a medical doctor who is suppose to know of the "dangers" of candy to children, is also a factor making these candy coated depressors less effective. Further, in some instances the depressor blade is longer due to the attachment of a candied element to the end of the blade held by the doctor, causing a likelihood that the patient's gag reflex will be over stimulated due to the doctor's over insertion of the now longer blade into the patient's mouth.

In addition to these physiological problems, several psychological disadvantages exist as well. With candy-enhanced depressors, the patient is rewarded before the need for cooperation has ended. Moreover, the reward is beyond the patient's field of vision during the exam and hence not perceptible to typically sight-minded young patients. Finally, it is expected that the doctor will give the patient the blade with the remaining confection on it for consumption after the oral exam's completion, which may complicate further examination.

U.S. Pat. No. 5,634,885, entitled "Tongue Depressor with Lollipop Holder," issued to **Kiro** on June 3, 1997, and is directed to a tongue depressor having a lollipop holder slot at the end of the blade of the depressor not intended to be placed into the patient's mouth, and a lollipop extending from the slot. While the '885 patent also discloses imprinting information/pictures onto the blade of the depressor, as can be seen in the '885 patent, any such information/picture is located directly proximate to the lollipop holder slot and so by definition is not intended to enter into the patient's mouth during examination.

U.S. Pat. No. 5,891,019, entitled "Tongue Depressor for Children and Method," issued to **Young et al.** on April. 6, 1999, and is similarly directed to a tongue depressor bearing an image 32. However, as with the '885 information/picture, image 32 of the '019 patent is also specifically intended to be located along an area of the depressor blade not intended to enter the patient's mouth. This is supported by the '019 patent's disclosure of tongue contact portion 20, which is said to be able to bear a flavor coating 22, but not any type of printed image element.

U.S. Pat. No. 3,867,927, entitled "Tongue Blade Sucker," issued to **Hergott** on Feb. 25, 1975, is a perfect example of how the prior art has gone to great lengths to avoid

placing any type of decorative image on the portion of the depressor blade intended to enter the patient's mouth. In the '927 patent, while the depressor blade may contain linear graduations 19 and/or a message 20, for any portions thereof located at the end of the blade intended to enter the patient's mouth a strip 17 is used to cover graduations 19 and/or message 20 so as to "provide a surface with which the examiner depresses the patient's tongue..." (See, column 2, lines 53 – 54)

Another patent bearing writing and/or images on the portion of the depressor blade not intended to enter the patient's mouth is U.S. Pat. No. 5,897,492, entitled "Candy Tongue Depressor," issued to **Feller et al.** on Apr. 27, 1999. In the '492 patent it is the distal end 13 of the depressor which contains any such written message and/or image, or the image is located under candy 12 so as to be covered when the depressor is in use in the doctor's office. (See, column 3, lines 30 – 48)

The above patented inventions differ from the present invention because each fails to describe or claim depressors bearing images over the entire surface of the blade of the depressor, even those surfaces intended to enter the patient's mouth during the examination while not being covered in order to do so.

A key disadvantage of these prior art inventions is that none offers an opportunity for empowerment of the young patient as well as interactivity between patient and doctor insofar as allowing the patient to select a favorite tongue depressor from among many different ones for use in the oral examination. This interactivity enhances the doctor-patient relationship and diminishes the patient's level of stress and anxiety in relation to the impending oral exam. In addition, the present invention's wide variety of visually arresting designs inspires the patient to look forward to future examinations, rather than dread them, because of the opportunity for another gratifying choice among the tongue depressor designs.

A further disadvantage of the prior art inventions is that none are intended to remain complete more than briefly after use in the oral examination. Consequently, this creates a disconnect in the patient's mental association between the item used during the examination and the item the doctor has provided as a "reward" and therefore does little to reduce fear of tongue depressors and oral examinations in future visits to the doctor. The present invention may be given to the patient as a take-home "reward" or keepsake

after completion of the oral exam. Since there is no change to the device before, during or after the examination, the patient can familiarize him/herself with and enjoy tongue depressors outside of the medical environment indefinitely, thereby breaking down the perception of tongue depressors strictly as a medical instrument to be feared and reducing fear and anxiety for future oral exams.

Another disadvantage is that many of the prior art inventions cannot be used with a standard instrument used by doctors that holds a standard shaped tongue depressor and illuminates the patient's mouth. This commonly used instrument (a self-illuminating tongue depressor handle attachment) accommodates only tongue depressors of standard shape. The present invention is designed to accommodate this medical instrument.

A final disadvantage is that many doctors are likely to discourage consumption of candy by their patients due to the lack of nutrients in such "empty calorie" products as well as concerns about childhood obesity. The use of tongue depressors that incorporate candy, whether bearing a candy coating or having a candy attachment, might send the wrong message to both patients and their parents that their doctor condones or approves of adding additional candy to their patients' already candy-rich diets.

It is thus an object of the present invention to provide a tongue depressor that diminishes patients' fear of oral exams generally, and tongue depressors specifically, on an ongoing basis, thereby making the examination a more pleasant experience for patients, parents and doctors. As the patient learns to enjoy tongue depressors rather than fear them, the patient's positive association with oral exams and tongue depressors will carry over into future examinations, making them more cooperative and speeding the oral examination process.

Summary of the Invention

In accordance with the invention, an innovative tongue depressor and apparatus for motivating cooperation amongst youthful patients during physical examinations, and specifically oral examinations, is provided. The tongue depressor comprises a blade having first and second sides and first and second tongue contact portions located along the first and second sides, respectfully. An ornamental image appears along at least a portion of at least the first tongue contact portion of the first side of the tongue depressor,

wherein any portion of the tongue depressor blade may be received within the mouth of the patient, even if the portion of the blade of the tongue depressor has the ornamental image appearing therealong. Another, or an identical ornamental image may appear on at least the second tongue contact portion of the second side of the blade of the depressor. Here again, whether this portion of blade is meant to go into the patient's mouth or not, the ornamental image may appear therealong. The ornamental image is made from ink approved by the U.S. Food and Drug Administration for application to items to be received within a person's mouth.

Accordingly, it is an object of the invention to provide an improved tongue depressor.

Still another object of the invention is to provide an improved tongue depressor that has an ornamental image appearing on at least one side of the blade of the depressor.

Yet another object of the invention is to provide an improved tongue depressor having an ornamental image appearing on both sides of the blade of the depressor.

A further object of the invention is to provide an improved tongue depressor having different ornamental images on the two different sides of the blade of the depressor, or multiple ornamental images along one or both sides of the blade of the depressor.

Yet a further object of the invention is to provide an improved tongue depressor wherein the ornamental image is made from FDA approved inks for application to items to be received within a person's mouth.

Still further objects of the invention are to:

(1) empower pediatric patients by permitting them to select the particular tongue depressor to be used by the doctor, prior to the oral examination.

(2) give young patients a sense of control and ownership within an event that is otherwise entirely beyond their control.

(3) add an element of fun, interactivity and relationship building to the examination process.

(4) allow the practitioner to immediately reward, and thus reinforce, the child for cooperative behavior.

(5) break the unhealthy tradition, which is increasingly being disavowed by medical practitioners, of rewarding children with candy or allowing uncontrolled consumption of sweets.

Other objects of the invention will impart the obvious and will impart the apparent from the following description.

The invention accordingly comprises assemblies possessing the features, properties and the relation of components which will be exemplified in the products hereinafter described, and the scope of the invention will be indicated in the claims.

Brief Description of the Drawings

For a fuller understanding of the invention, referenced is made to the following description, taken in connection with the accompanying drawings, in which:

Fig. 1 is a top plan view of the tongue depressor; and

Fig. 2 is a perspective view of the same tongue depressor.

Detailed Description Of The Preferred Embodiments

Referring to the figures, tongue depressor **10** is comprised of a thin, flat, non-edible stick with a longitudinal axis made of a nontoxic material such as wood, wood composite, plastic, plastic composite, cardboard or cardboard composite, or any other applicable material known in the trade of making tongue depressors. Tongue depressor **10** can be a standard size or any other size whose length and width is appropriate for use as a tongue depressor. In addition, tongue depressor **10** may be sterile or non-sterile, and may contain a flavor coating, or could simply be flavorless.

Tongue depressor **10** bears vivid ornamental images **12** printed directly onto the blade **20** by way of screen printing or other known printing methods. In the shown preferred embodiment, ornamental images **12** are of flowers, but the invention anticipates that ornamental images **12** can include any known image or writing, including, but not limited to, patterns, images, cartoon characters, corporate logos, advertising messages, or any other image that is appealing to children.

Tongue depressor **10** is printed using non-toxic ink **14** that has been approved by the U.S. Food and Drug Administration or other approval process to be safely used inside the mouth, on the tongue.

It is also to be understood from the figures that tongue depressor **10** may be printed with ornamental image **12** on one of its sides **16** or both of its sides **16**, as is best seen in Fig. 2. In addition, the invention anticipates that ornamental image **12** may consist of the same or different image(s) on either of sides **16** and/or along either of sides **16**; i.e., multiple images may appear on either of sides **16**, and/or on both. Further, ornamental image **12** can be printed along the entire surface of blade **20**, or along only a portion or portions thereof. Images **12** can also be printed in one color or multiple colors.

It will thus be seen that the objects set forth above, among those made apparent from the preceding description, are efficiently attained, and since certain changes may be made in the above constructions without departing from the spirit and scope of the invention, it is intended that all matter contained in the above description and shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention, which, as a matter of language, might be said to fall therebetween.